

REMARKS

Claims 1-23 are canceled, and claims 24-29 have been added. Thus, claims 24-29 are pending. No new matter was added. Applicant submits that claims 24-29 are patentable over the prior art cited by the Examiner in the Final Office Action. Accordingly, allowance of the present application is respectfully requested.

New Claims 24-29

Claim 24 includes limitations previously stated in claims 1, 3 and 14 and disclosed on page 3, lines 20-25, and page 4, lines 9-17, of the present application, as filed. Claim 25 includes limitations previously stated in claim 5, and claims 26 and 27 include limitations previously stated in claim 18. Claim 28 includes limitations previously stated in claim 12, and claim 29 includes limitations previously stated in claims 17, 3 and 14 and disclosed on page 3, lines 20-25, page 4, lines 9-17, and page 5, lines 23-31 of the present application, as filed. No new matter was added.

Claim Rejections Under 35 USC §112, second paragraph

In the FINAL Office Action, the Examiner rejected various claims under 35 USC §112, second paragraph, as being indefinite. More specifically, the term “the film” should be replaced with either “the film composite” or “the plastics film”.

Claims 24-29 have been written such that the term “the film” has been eliminated. The claims refer more specifically to either a “film composite” or a “plastics film”.

Reconsideration and removal of the rejections under 35 USC §112, second paragraph, are respectfully requested.

Claim Rejections Under 35 USC §103(a)

In the FINAL Office Action, the Examiner rejects all the claims under 35 USC §103(a) as being obvious over: (a) U.S. Patent No. 5,790,169 issued to Hohenacker and JP 09-211779 in view of U.S. Patent No. 6,001,463 issued to Shibahara et al.; and (b) U.S. Patent No. 5,790,169 issued to Hohenacker and JP 09-211779 in view of U.S. Patent No. 6,001,463 issued to Shibahara et al. and in further view of International Publication No. WO 91/12139.

The independent claims of the present application, claims 24 and 29, require a light sensitive film composite containing a photochromic fulgide that is sensitive to green light emitted by a TV screen, or the like, and that has low tendency to thermochromism (ie., color change resulting from heat-induced isomerization). (See page 4, line 9-11, of the present application, as filed.) This clearly distinguishes claims 24 and 29 from the JP '779 reference, as will be discussed. Claims 24 and 29 of the present application also require a white base film having specular properties suitable for machine reading of the exposed composite.

The Hohenacker '169 patent discloses an information storage device (see Fig. 3 of Hohenacker) which comprises a photosensitive layer (17) placed onto a mask (16). The photosensitive layer is covered by a reflective layer (18) and the mask is covered by a protective film (15). The photosensitive layer (17) may comprise a photochromic material which is said to become transparent when irradiated with visible light (see column 3, lines 59-62, of Hohenacker) and the reflective layer may be white or metallic (see column 4, line 23, of Hohenacker). The Hohenacker '169 patent also teaches the use of a plurality of photochromic substances that react at different wavelengths of light.

However, the Hohenacker '169 patent fails to teach the use of a photochromic fulgide, and in particular, a fulgide that is responsive only to green light emitted by a TV screen, or like monitor.

Furthermore, the Hohenacker '169 patent fails to disclose that the reflective white plastics film should have specific reflective properties so that a change of state of the photochromic material can be read or measured by instruments (see page 5, lines 12-22, of the present application, as filed). More specifically, Hohenacker fails to disclose that the white filler particles be selected so that they confer diffuse reflective properties on the film at a wavelength characteristic of the photochromic fulgide, and that specular reflection should be minimal, as required by the claims of the present application.

There is no teaching in the Hohenacker '169 patent as to the difficulties in reading the information carried on the card disclosed therein. Indeed, the Hohenacker '169 patent merely states that the cards can be evaluated (see column 2, line 28, of Hohenacker) without any recognition of the problems of the evaluation process or any means of overcoming those problems.

The JP 09-211779 reference discloses a light sensitive recording medium in which photochromic material is held in a resin matrix that may be coated onto a white PET film base. The specific examples utilize stilbene type dyes in a polystyrene matrix. The object of the invention is to produce an image recording medium which is not sensitive to UV and visible light so that the image will not deteriorate on storage. This is achieved by the photochromic compound being able to undergo an isomeric transition only when the resin matrix is heated to above its glass transition temperature (T_g). (See paragraph no. 0019 of JP '779.) After an image is recorded at the elevated temperature, the recorded image can only be erased by further light irradiation at elevated temperature thereby providing a light

stable record until such time as the further irradiation at elevated temperature takes place.

The T_g is not disclosed but is clearly well above room temperature since in paragraph no. 0048 of JP '779 it is stated that when left at room temperature under a fluorescent light there is no change in image.

For these reasons, the laminate disclosed by the JP 09-211779 reference is clearly not suitable for use in monitoring light emissions from a monitor or TV screen at room temperature, which is required by the claims of the present application.

For example, claims 24 and 29 of the present application require the use of a fulgide that is sensitive to green light. The green light sensitive fulgide has advantages over other fulgides sensitive to other wavelengths in that the green light sensitive fulgide reacts more quickly with the green light emitted by the green gun of a TV or monitor, while other known fulgides sensitive to other wavelengths of light react more slowly. There is no disclosure of this fulgide in the JP 09-211779 reference.

Furthermore, the fulgide defined in claims 24 and 29 of the present application are required to have a low tendency to thermochromic behavior, which is heat induced color transition (see page 4, line 10, of the present application).

Applicants submit that the restriction of claims 24 and 29 to a film composite which is sensitive at room temperature to light and which has a low tendency to thermochromism overcomes the Examiner's argument on page 4 of the FINAL Office Action. To this end, the coverage of the claims as pending clearly exclude a film as disclosed by the JP 09-211779 reference which requires heating above room temperature during recording of information.

Applicants respectfully submit that neither the Hohenacker '169 patent nor the JP 09-211779 reference, nor any of the other cited references, discloses the specific use of a fulgide

sensitive to green light and provides a film with the necessary properties to address the problem of being able to readily read the stored information after exposure.

It is therefore submitted that the present invention as now claimed is novel over the cited prior art and is not obvious in view of any combination of the cited documents.

For these reasons, Applicants respectfully request reconsideration and removal of the 35 USC §103(a) rejections of the claims of the present application.

Conclusion

Applicants have made a significant advance in light-sensitive film composites sensitive to light emissions from a screen of a monitor, such as a television screen at room temperature. Thus, the invention is meritorious.

In view of the above amendments and remarks, Applicants respectfully submit that the rejections have been overcome and that the present application is in condition for allowance. Thus, a favorable action on the merits is therefore requested.

Please charge any deficiency or credit any overpayment for entering this Amendment to our deposit account no. 08-3040.

Respectfully submitted,
Howson and Howson
Attorneys for Applicants

By William Bak
William Bak
Reg. No. 37,277
Spring House Corporate Center
Box 457
Spring House, PA 19477
(215) 540-9216